

PRIFYSGOL BANGOR **UNIVERSITY** 

### Introduction -

The overall aim of this project is to create a man overboard device that will use the features of the IOT things that will be able to detect when someone falls overboard and alert either the skipper or local authorities of their most recent location

the device will utilise the use of a raspberry pie to create a prototype of the device the device features accelerometer to detect motion and impact force. The devices uses a water sensor to detect when the user is submerged and will use Bluetooth to connect to a phone and use GPS to locate the user

All of these features will allow for a device that will aid in recreational water recovery.

# Technology used -

Raspberry pie – The hardware used in the device prototype is a Raspberry pie.

this device is a small computer

that has the capability to run what is need to create an effective life saving device



**Python** – Python is an object-orientated, Interpreted programming language. It is used in the device to run the sensors that will allow the device to detect water and the impact

# To create a life saving device using the Internet of things (IOT)

# Methods -

To develop a man overboard device the use of hardware and software to create the deice is imperative to create a system the

The device uses python to control the devices sensors, the moisture sensors and the accelomitor to create a working system

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# Further Work -

Further development at this stage is required to ensure an effective device that can save lives.

The device currently has the ability to detect movement and whether the device is submerged but it would be beneficial to add another sensor to reduce the margin for error such as a pressure monitor for example.

Developing a app would also be very beneficial. creating an application that can link to the device Via Bluetooth and use the phones Bluetooth and cellular service will aid the device substantially.